## **CLAIMS**

What is claimed is:

1	1.	A method.	comprising:

- determining, in response to being accessed by a first requester, whether a 2
- component is available; and 3
- 4 replacing, if the component is available, a first indicator indicating that the shared
- resource is available, with a second indicator reducing access to the component, to permit 5
- access to the component by the first requester. 6
  - 2. The method of claim 1, further comprising:
  - indicating, if the component is unavailable, the second indicator to the first requester to prohibit access to the component by the first requester.
  - 3. The method of claim 2, wherein being accessed by the first requester comprises the first requester executing a read.
- 1 4. The method of claim 3, further comprising indicating the first indicator to
- the first requester to indicate that the first requester can access the component. 2
- 5. The method of claim 2, wherein being accessed comprises the first 1
- requester executing a write of the second indicator. 2

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- The method of claim 5, wherein the second indicator comprises an 6. 1 identifier of the first requester. 2
- The method of claim 2, wherein determining, in response to being 7. 1 accessed by the first requester, whether the component is available comprises 2 determining a presence of the first indicator. 3
- The method of claim 2, wherein determining, in response to being 8. 1 accessed by the first requester, whether the component is available comprises 2 determining based on an external indicator that the component is available. **1** 3
  - The method of claim 8, wherein the external indicator comprises a flag. 9.
  - The method of claim 2, further comprising receiving, by execution of an 10. operation by a second requester upon completion of access to the component by the second requester, a third indicator increasing access to the component to replace the second indicator.
  - The method of claim 10, wherein the operation comprises a write of the 11. 1 third indicator. 2
  - The method of claim 11, wherein the first requester and the second 12. 1 requester comprise processes. 2

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- 1 13. The method of claim 11, wherein the first requester and the second requester comprise one requester.
- 1 14. The method of claim 11, wherein the first indicator and the third indicator comprise a same indicator.
  - 15. A method, comprising:
- determining, in response to being accessed by a first requester, whether a
- 3 component is available;
- prohibiting accesses by one or more additional requesters;
  - replacing, because the component is available, a first indicator indicating that the component is available, with a second indicator reducing access to the component; and allowing the first requester to indicate that the component is available.
  - 16. The method of claim 15, wherein being accessed comprises the first requester executing a read.
  - 1 The method of claim 16, wherein the first requester and the one or more additional requesters comprise registers.
  - 1 18. The method of claim 17, wherein the registers comprise set-by-read 2 registers read by processes attempting to access the component.

- 1 19. The method of claim 17, wherein the registers comprise set-by-write registers written to by processes attempting to access the component.
- 1 20. The method of claim 17, wherein the accesses by the one or more requesters comprise reads.
- 1 21. The method of claim 17, wherein the accesses by the one or more 2 requesters comprise writes of indicators of processes attempting to access the component.
  - 22. The method of claim 17, wherein determining, in response to being accessed by the first requester, whether the component is available comprises determining a presence of the first indicator indicating that a component is available.
  - 23. The method of claim 17, wherein determining, in response to being accessed by the first requester, whether the component is available comprises determining based on an external indicator that the component is available.
- 1 24. The method of claim 23, wherein the external indicator comprises a flag.
- 1 25. The method of claim 17, further comprising:
- 2 receiving from a second requester a third indicator increasing access to the
- 3 component;

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determining, because of receiving the third indicator, that access to the component 4 has been increased; and 5 replacing the second indicator with the third indicator increasing access to the 6 component. 7 The method of claim 25, wherein the first requester and the second 26. 1 requester comprise one requester. 2 A method of obtaining access to a shared resource, comprising: 27. 1 accessing a register; and <u>1</u> 2 changing, as a result of accessing the register if the register detects a first value; indicating that the shared resource is available, the first value to a second value; and limiting access to the shared resource. The method of claim 27, wherein accessing the register comprises reading 28. 1 the register. 2 The method of claim 27, wherein accessing the register comprises writing 29. 1 the second value to the register. 2 The method of claim 29, wherein the second value comprises an identifier 30. 1 of a process. 2

- The method of claim 30, further comprising reading the register to 31. 1 determine that the register contains the identifier. 2 The method of claim 27, wherein the shared resource comprises a 32. 1 peripheral device in a computer system. 2 The method of claim 27, further comprising: 33. 1 receiving from the register the first value indicating that the shared resource is 2 available; 3 accessing the shared resource; and Last Comment of the Last of the Comment of the Comm changing upon completion of access to the shared resource, the second value to a third value increasing access to the shared resource. The method of claim 33, wherein changing the second value to the third 34. 1 value comprises writing the third value to the register. 2 The method of claim 34, wherein the first value, the second value and the 35. 1 third value comprise variables. 2
  - The method of claim 35, wherein the first value and the third value 36. 1 comprise a same variable. 2

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1	37. A method, comprising:		
2	executing by a process an operation;		
3	determining by a register, in response to the operation, whether a first indicator		
4	allowing access to a shared resource is present in the register;		
5	changing by the register if the first indicator is present, the first indicator to a		
6	second indicator reducing access the shared resource;		
7	sending by the register the first indicator to the process;		
8	determining by the process receipt of the first indicator;		
9	using by the process the shared resource; and		
<u>10</u>	replacing by the process the second indicator with a third indicator increasing		
The second secon	access to the shared resource.		
1	38. The method of claim 37, wherein the operation comprises a read of the		
2	register.		
2	39. The method of claim 38, wherein the register comprises a set-by-read		
₩ 2	register.		

- The method of claim 37, wherein the operation comprises a write of the 40. 1 second indicator to the register. 2
- The method of claim 40, wherein the register comprises a set-by-write 41. 1 register. 2

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indicator to the first requester to prohibit access to the component by the first requester.

- 1 48. The article of claim 47, wherein the sequences of instructions that cause 2 the machine to determine, in response to being accessed by the first requester, whether 3 the component is available comprise sequences of instructions that, when executed, cause 4 the machine to determine, in response to the first requester executing a read, whether the 5 component is available.
- 1 49. The article of claim 48, further comprising sequences of instructions that, 2 when executed, cause the machine to indicate the first indicator to the first requester to 3 indicate that the first requester can access the component.
  - 50. The article of claim 47, wherein the sequences of instructions that cause the machine to determine, in response to being accessed by the first requester, whether the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to the first requester executing a write of the second indicator, whether the component is available.
- 1 51. The article of claim 50, wherein the sequences of instructions that cause 2 the machine to determine, in response to the first requester executing a write of the 3 second indicator, whether the component is available comprise sequences of instructions 4 that, when executed, cause the machine to determine, in response to the first requester 5 executing the write of an identifier of the first requester, the presence of the indicator.

- The article of claim 47, wherein the sequences of instructions that cause 52. the machine to determine, in response to being accessed by the first requester, whether 2 the component is available comprise sequences of instructions that, when executed, cause 3 the machine to determine, in response to being accessed by the first requester, a presence 4 of the first indicator.
  - The article of claim 47, wherein the sequences of instructions that cause 53. the machine to determine, in response to being accessed by the first requester, whether the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to being accessed by the first requester, that the component is available based on an external indicator.
    - The article of claim 53, wherein the sequences of instructions that cause 54. the machine to determine, in response to being accessed by the first requester, based on an external indicator that the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to being accessed by the first requester, that the component is available based on a flag.
  - The article of claim 47, further comprising sequences of instructions that, 55. 1 when executed, cause the machine to receive, by execution of an operation by a second 2 requester upon completion of access to the component by the second requester, a third 3 indicator increasing access to the component to replace the second indicator. 4

- The article of claim 55, wherein the sequences of instructions that cause 56. 1 the machine to receive, by execution of the operation by the second requester upon 2 completion of access to the component by the second requester, the third indicator 3 increasing access to the component to replace the second indicator comprise sequences of 4 instructions that, when executed, cause the machine to receive, by execution of a write of 5 the third indicator by the second requester upon completion of access to the component 6 by the second requester, the third indicator increasing access to the component to replace 7 the second indicator. 8
  - 57. The article of claim 56, wherein the first requester and the second requester comprise processes.
  - 58. The article of claim 56, wherein the first requester and the second requester comprise one requester.
  - 59. The article of claim 56, wherein the first indicator and the third indicator comprise a same indicator.
  - 1 60. An article of manufacture comprising a machine-accessible medium
    2 including thereon sequences of instructions that, when executed, cause a machine to:
    3 determine, in response to being accessed by a first requester, whether a
    4 component is available;
  - 5 prohibit accesses by one or more additional requesters;

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replace, because the component is available, a first indicator indicating that the component is available, with a second indicator reducing access to the component; and allow the first requester to indicate that the component is available.

- 61. The article of claim 60, wherein the sequences of instructions that cause the machine to determine, in response to being accessed by the first requester, whether the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to the first requester executing a read, whether the component is available.
  - 62. The article of claim 61, wherein the first requester and the one or more additional requesters comprise registers.
  - 63. The article of claim 62, wherein the registers comprise set-by-read registers read by processes attempting to access the component.
- 1 64. The article of claim 62, wherein the registers comprises a set-by-write 2 registers written to by processes attempting to access the component.
- The article of claim 62, wherein the sequences of instructions that cause
  the machine to prohibit accesses by one or more additional requesters comprise
  sequences of instructions that, when executed, cause the machine to prohibit reads by one
  or more additional requesters.

- 67. The article of claim 62, wherein the sequences of instructions that cause the machine to determine, in response to being accessed by the first requester, whether the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to being accessed by the first requester, a presence of the first indicator.
  - 68. The article of claim 62, wherein the sequences of instructions that cause the machine to determine, in response to being accessed by the first requester, whether the component is available comprise sequences of instructions that, when executed, cause the machine to determine, in response to being accessed by the first requester, that the component is available based on an external indicator.
- 1 69. The article of claim 68, wherein the sequences of instructions that cause 2 the machine to determine, in response to being accessed by the first requester, based on 3 an external indicator that the component is available comprise sequences of instructions 4 that, when executed, cause the machine to determine, in response to being accessed by 5 the first requester, that the component is available based on a flag.

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- The article of claim 62, further comprising sequences of instructions that, 70. 1 when executed, cause a machine to: 2 receive from a second requester a third indicator increasing access to the 3 component; 4 determine, because of receiving third indicator, that access to the component has 5 been increased; and 6 replace the second indicator with the third indicator increasing access to the 7 component. 8 The article of claim 70, wherein the first requester and the second 71. 1 requester comprise one requester. 2 An apparatus comprising: 72. a resource; 2 a storage area in the resource; 3 a first value in the storage area, which the storage area changes to a second value 4 in response to access to the storage area; and 5 the second value in the storage area. 6
  - The apparatus of claim 72, wherein the resource comprises a peripheral device in a computer system.
    - 74. The apparatus of claim 72, wherein the storage area comprises a register.

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